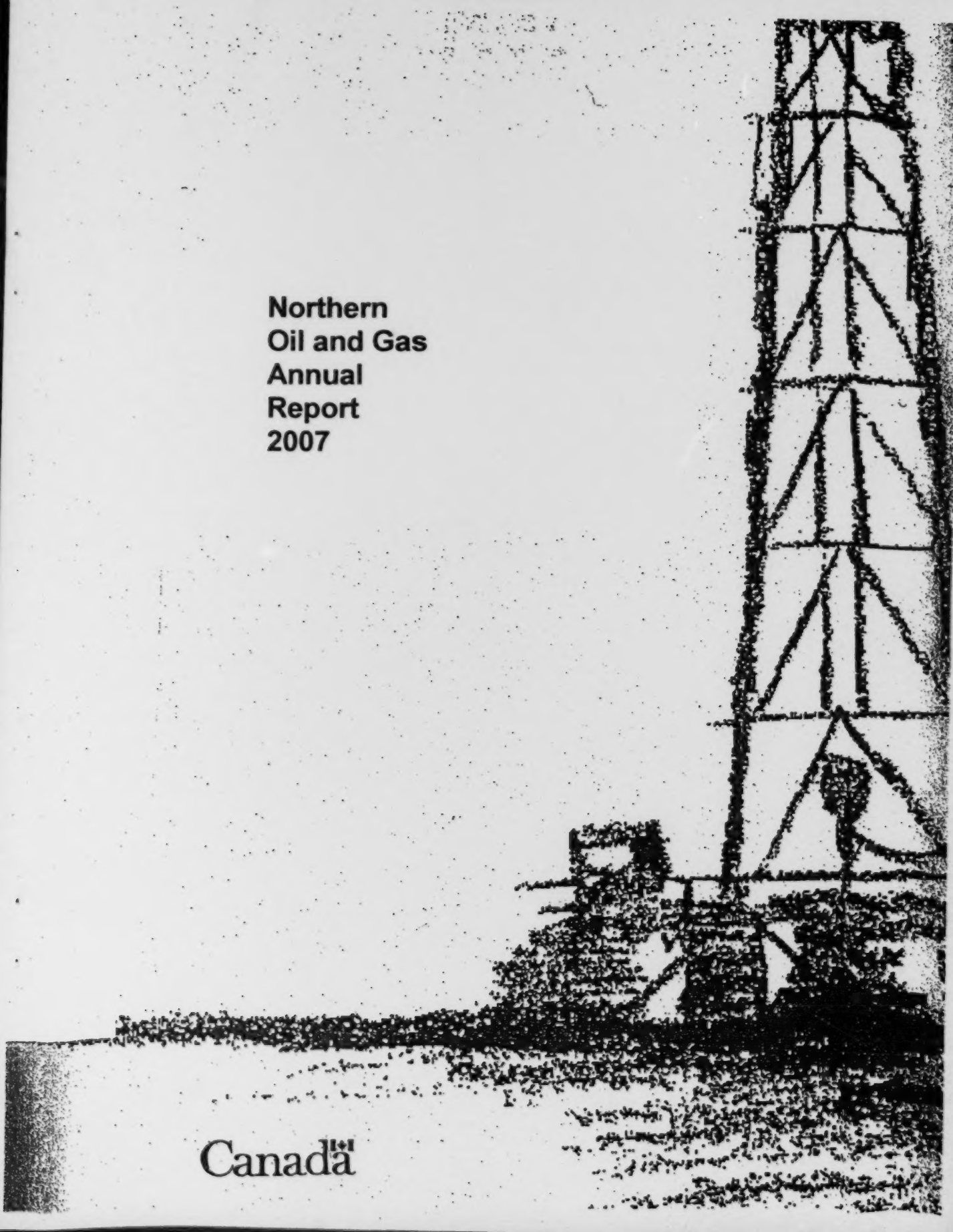
Northern Oil and Gas Annual Report 2007



Canada

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Northern Oil and Gas Annual Report 2007

The management of oil and gas resources on Crown lands north of latitude 60° N in the Northwest Territories, Nunavut and the northern offshore is a federal responsibility carried out by the Northern Oil and Gas Branch of Indian and Northern Affairs Canada.

Petroleum resource management on Crown lands is exercised under federal legislation. The *Canada Petroleum Resources Act* and its regulations govern the granting and administration of Crown exploration and production rights and set the royalty regime. The *Canada Oil and Gas Operations Act* governs the regulation of petroleum operations and associated benefits requirements. Land, royalty and benefit matters are managed by the department on behalf of the Minister of Indian Affairs and Northern Development while the National Energy Board takes the lead role in approval of operations.

Information on the northern oil and gas regime may be found on the web at: http://www.ainc-inac.gc.ca/oil/

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Message from the Honourable Chuck Strahl, P.C., M.P.
Minister of Indian Affairs and Northern Development and
Federal Interlocutor for Métis and Non-Status Indians

Now, more than ever, the enormous resource potential of the North is being unlocked – from the development of world-class diamond mines to the exploration of the North's extensive oil and gas reserves.

Last year, we saw seven new oil and gas exploration licences issued in the Mackenzie Valley and in the Mackenzie Delta-Beaufort Sea Basin, including one work expenditure bid for a record $585 million. Four significant new discoveries were declared, and the Joint Review Panel for the Mackenzie Gas Project completed their environmental assessment public hearings.

All of this activity demonstrates that industry partners recognize the potential that lies beneath the surface of the North's lands and waters.

The Government of Canada is convinced that this potential can drive the sustained economic activity needed to help provide wealth and employment to Northerners and, in turn, build strong and healthy Northern communities. A strong and prosperous North means a stronger and more prosperous Canada.

That is why we are determined to move farther and faster to prepare for the challenges and opportunities these developments represent, and why our Government is implementing an integrated Northern Strategy to ensure the North is ready for them.

Efforts such as the Northern Regulatory Improvement Initiative will help streamline the current complex approval process. Amendments to the Canadian Oil and Gas Operations Act and the Mackenzie Valley Resources Management Act will close regulatory gaps, ensure fair, non-discriminatory access to pipelines and related facilities in the North, and honour the basic principle of "one project, one environmental assessment." Plans for new legislation in Nunavut will also resolve potential duplication in the environmental assessment process.

Improvements such as these will build on the momentum of previous years to encourage future exploration and development, protect the Northern environment, ensure all Northerners, including Aboriginal peoples, benefit directly from their growing economy, and help realize the benefits of Comprehensive Land Claims Agreements in the North.

I invite you to review this report for further details on the exploration and development of Canada's northern oil and gas resources over the past year.

In accordance with section 109 of the Canadian Petroleum Resources Act, I am pleased to table before Parliament this annual report on the administration of oil and gas lands in the Northwest Territories, Nunavut and the northern offshore for the year ending December 31, 2007.

April 28, 2008

Canada's Frontier Lands

Area under the responsibility of the Minister of Indian and Northern Affairs Canada

Table of Contents

NORTHERN OIL AND GAS 7
Introduction 7
Oil and Gas Resources 9

OIL AND GAS MANAGEMENT 12
Rights Issuance 12
Interests Issued in 2007 13
Significant and Commercial Discovery Declarations and Development Plan Submissions 13
Administration of Interests 15
Exploration Licences 15
Security Deposits Being Administered 18
Benefits 18
Environmental Considerations 19
Environmental Studies Research Funds (ESRF) 19

EXPLORATION ACTIVITY IN THE NORTH 20
Northern Operations 20

DEVELOPMENT AND PRODUCTION 23

ROYALTIES 26
Audits and Assessments 26
Royalty Administration 26
Regulatory Amendments 26

FURTHER INFORMATION 27
Northern Oil and Gas Branch 27
Other Sources of Information 28

List of Tables

Table 1: Discovered Resource Inventory 11

Table 2: Commodity Prices 11

Table 3: Exploration Licences Issued as a Result of Calls for Bids 14

Table 4: Land Disposition (in hectares) 14

Table 5: Land Disposition by Interest Type 15

Table 6: Exploration Licences 16

Table 7: Revenues 18

Table 8: Drilling Statistics - 2007 21

Table 9: Seismic Acquisition 21

Table 10: Oil and Gas Production 23

Table 11: Royalty Revenues 26

List of Figures

Figure 1: Wells Drilled 22

Figure 2: Seismic Acquisition 22

Figure 3: Oil Production 24

Figure 4: Gas Production 24

Figure 5: Oil and Gas Fields — Southern Northwest Territories 25

NORTHERN OIL AND GAS

Introduction

Much of Canada's undeveloped oil and gas potential is to be found in Canada's North. Some petroleum basins such as the Mackenzie Delta-Beaufort Sea Basin have seen significant exploration and already have a long inventory of discoveries. Others such as Canada's Arctic continental shelf and slope, the Mackenzie Valley of the Northwest Territories, and much of the High Arctic and eastern Arctic offshore remain lightly explored and offer opportunities to make new and potentially large discoveries of both gas and oil. The variety of geology in Canada's North offers a spectrum of plays ranging from onshore exploration for conventional gas or oil pools to major strategic opportunities in deep water basins around the continental margin.

History

Oil and gas exploration has a long history in the Canadian North, dating back to the Norman Wells oil discovery drilled in 1920. The late 1940s and 1950s saw increased exploration in the southern Northwest Territories followed by exploration throughout the North in the period 1960 to 1985, activity stimulated by the "oil price shock" of 1974 and concerns for domestic supply.

Current interest in the North dates from the mid-1990s. Oil and gas exploration and investment began to flow North in 1995 with the issuance of new Exploration Licences (EL) by the Crown in the southern Northwest Territories, closely followed by the Central Mackenzie Valley. In 1999 and 2000 companies acquired exploration rights to lands across much of the Mackenzie Delta and adjacent offshore. Subsequently, annual calls to industry to nominate new land blocks for exploration in the Central Mackenzie Valley and Mackenzie Delta- Beaufort Sea have sustained uptake of new Exploration Licences. This in turn has been followed by investment in exploration activities such as seismic prospecting and exploratory drilling.

Over the past decade, resurgent investment in oil and gas exploration and development in Canada's North has been a visible expression of Canadian sovereignty over this vast area and an important stimulus for economic activity.

2007 Highlights

Oil and gas leasing was active in the Central Mackenzie Valley and in the Mackenzie Delta-Beaufort Sea Basin. Seven new Exploration Licences were issued in 2007 as a result of these calls for a total work expenditure commitment of $613 million.

Three of these new Exploration Licences lie in the Beaufort Sea. The most northerly of these was won by Imperial Oil Resources Ventures Limited and ExxonMobil Canada Properties Limited with a record work expenditure bid of $585 million. This licence covers an extensive and previously undrilled region of the outer continental shelf extending into deep water off the shelf edge. The second offshore licence, issued to Chevron, lies the western Beaufort Sea close to existing discoveries at Adlartok (1985, oil) and Kingark (1987, gas). The third, to ConocoPhillips, is offshore Richards Island in an area extending north to adjoin the existing significant discovery licence at Amauligak, (a major oil and gas discovery made in 1983).

Four new Exploration Licences were issued following the Central Mackenzie Call for work expenditure bids totaling $15 million. Two of these, taken up by BG International Ltd., are in the Ka'sho-Got'ine district of the Sahtu west of the Colville Hills, an area with a proven gas play and four existing discoveries. One licence was issued to Husky in the Tulita District some 90 kilometres south of the hamlet of Tulita on the Mackenzie Plain. This new licence borders areas just to the North which have seen recent successful exploration by the same company. The third licence, issued to MGM Energy is centered 50 kilometres north of Norman Wells.

In the southern Northwest Territories Exploration Licences issued in the mid-1990s terminated over three years ago and consequently the region has seen no recent exploration activity.

No nominations were received for the Arctic Islands of Nunavut. Although the industry is aware of the significant discovered resource in the Arctic Islands, and of the excellent exploration potential, this result indicates that companies are deferring commitments to new exploration in this area for the time being.

In corporate news, of particular note was the creation of MGM Energy, first as a wholly owned subsidiary of Paramount Resources Ltd. and subsequently as a separate company. MGM became owner of exploration rights to extensive lands in the Mackenzie Delta, Colville Lake and certain other interests. Formerly owned by Paramount and before being conferred on the new company, these interests included a farm-in on EL394 and EL427 in the Mackenzie Delta, previously operated by Chevron. Later in the year MGM consolidated its land position on the Mackenzie Delta by purchasing EnCana's interests, including the 2006 gas discovery at Umiak.

Only one major development is currently proposed for the North. This is the Mackenzie Gas Project comprising development of three anchor fields in the Mackenzie Delta, construction of gathering and processing facilities, and a 1200 kilometre natural gas transmission pipeline to Alberta. Initially, production would be from the Imperial Oil's Taglu, ConocoPhillips' Parsons Lake and Shell Canada's Niglintgak gas fields in the Mackenzie Delta, currently held by significant discovery licences. Public hearings relating to facilities before the National Energy Board, and for environmental assessment before the Joint Review Panel were held during the year.

The number of exploratory wells in 2007 was lower than the previous year and drilling was limited to the Mackenzie Delta. The principle stimulus in this area was the entry of MGM Energy into Mackenzie Delta exploration with plans for a multi-year exploratory drilling program on its newly acquired Exploration Licences. Drilling in Central Mackenzie Valley is expected to revive next year on the basis of extensive seismic operations conducted in 2007. In the southern Northwest Territories activity focused on development of existing production operations, principally at Cameron Hills.

Promising indications from exploratory drilling in 2005 and 2006 were confirmed during the year when the National Energy Board declared four new significant discoveries. Two of these, at Olivier and Umiak, are in the Mackenzie Delta and add potential resources within a short radius of proposed developments for the Mackenzie Gas Project. MGM Energy has announced that the Umiak discovery holds approximately 444 billion cubic feet of gas ($12.6 \times 10^9 m^3$) (MGM Energy Corp News release, December 10, 2007.) The third declaration was at the Devon Paktoa C-60 discovery drilled in the shallow waters of the Beaufort Sea.

Company spokespersons have indicated that this discovery holds 240 million barrels of oil (3.8×10^7 m^3) but development is not currently envisaged for the near future. In the Central Mackenzie Valley, the National Energy Board declared a significant discovery for the Husky et al. Stewart Creek D-57 well. This location is west of the Mackenzie River and some 50 kilometres south of Tulitá. It is of particular interest since this discovery extends across both Crown and private aboriginal lands.

Although overall natural gas production remained at levels similar to 2006, the decision by Paramount to suspend production from its three fields in the Liard Basin has left Cameron Hills as the principal producing field in the southern Northwest Territories (Limited production was still continuing from Paramount's West Liard field at year-end). The company cited low natural gas prices, few new gas finds and the lack of new lands opening up for exploration as the main reasons for this decision. Consequently by year end, only four fields were producing in the Northwest Territories, and none in Nunavut or offshore Arctic waters. In addition to the oil and gas field at Cameron Hills just north of 60, the Norman Wells oil field in the Central Mackenzie Valley continued to produce steadily into the Enbridge pipeline; and the Ikhil gas field on the Mackenzie Delta provided a secure supply of natural gas to the town of Inuvik.

Oil and Gas Resources

In 2002, a comprehensive review by *Drummond Consulting* for Indian and Northern Affairs Canada estimated that 33 percent of Canada's remaining conventionally recoverable resources of natural gas and 25 percent of remaining recoverable light crude oil occurs in Canada's Northwest Territories, Nunavut, and Arctic Offshore.

Potential natural gas resources are roughly split between the Northwest Territories, 2.3×10^{12} m^3 (82 trillion cubic feet – (Tcf), and Nunavut, 2.0×10^{12} m^3 (71 Tcf). These numbers include the portion lying beneath offshore waters adjacent to the Territories. The Northwest Territories has an ultimate potential for crude oil estimated at 0.9×10^9 m^3 (5.7 billion barrels) and Nunavut has a potential of 0.43×10^9 m^3 (2.7 billion barrels). It should be noted that estimates of potential based on sparse exploration and production data are inherently uncertain. This is the case for most of Canada's northern petroleum basins.

The most accessible of these potential resources lie between the border with the provinces at 60 degrees North and the Beaufort Sea in a broad corridor running between the Rocky Mountains and the Canadian Shield and includes the northern fringe of the Western Canada Sedimentary Basin. The western Arctic includes much of the Northwest Territories and adjacent Arctic offshore, and is estimated to contain about half of the recoverable petroleum in northern Canada, with the Beaufort Sea-Mackenzie Delta Basin the largest potential contributor.

Limited production from the southern Northwest Territories is exported from the Territory into the pipeline systems of Alberta and British Columbia. Gas production from a single small field in the Mackenzie Delta is consumed locally and gas produced with oil at Norman Wells is used for field operations. Ninety-six percent of oil production comes

from the Norman Wells oil field in the Central Mackenzie Valley.

In the Beaufort Sea-Mackenzie Delta Basin, major gas fields at Taglu and Parsons Lake, together with the large Niglintgak field are proposed for development by the Mackenzie Gas Project (MGP). Combined resources in these fields are estimated by the proponents of the MGP at (161 x 10^9 m^3 (5.7 Tcf) (Imperial Oil Ventures Limited, 2004; *Application to the National Energy Board for Approval of the Mackenzie Valley Pipeline; Volume II Economics, Tolls and Tarifs; Gas Supply Study, section 4.1.*)

Over 50 other discoveries in this basin may have potential for subsequent development, including Amauligak, a major offshore discovery of both oil and gas, and a new significant discovery declared in 2007 at the Devon Paktoa C-60 well in the shallow waters of the Beaufort Sea, reported to contain 240 million barrels of oil (3.8 x 10^7 m^3). Onshore Mackenzie Delta, there have been several recent gas discoveries, adding significant resources to the existing inventory of gas resources in the basin. Numerous others await discovery. Other developments which may be induced by the MGP are gas resources in the Central Mackenzie Valley which could access a Mackenzie Valley pipeline by means of a short lateral pipeline.

Discovered gas volumes in the High Arctic of Nunavut and the Northwest Territories are comparable to those in the Beaufort Sea-Mackenzie Delta region. The most promising basin is the Sverdrup Basin of the Arctic archipelago, where past discoveries include major gas fields at Drake Point and nearby Hecla with combined resources estimated at 257 x 10^9 m^3 (9.1 Tcf). Significant oil discoveries and large unexplored oil potential is also present in this vast region of diverse and varied geology.

Also of potential future interest for development are non-conventional hydrocarbons in the North. These include gas from coal, shale and large accumulations of methane hydrates beneath the Mackenzie Delta.

Table 1: Discovered Resource Inventory

Region	Crude Oil 10^6 m^3	Million Barrels	Natural Gas 10^9 m^3	Trillion Cubic Feet
Northwest Territories (and offshore, including Beaufort Sea)	253.5	(1,597.0)	345.6	(12.2)
Nunavut (and offshore)	51.4	(324.0)	543.9	(19.2)
Total	304.9	(1,929.0)	889.5	(31.4)

Notes:

Compiled and integrated from several published sources which may underestimate or overestimate actual field resources.

Numbers may not add due to rounding.

Totals have been reduced by estimates from Yukon but may include some Yukon resources in the Mackenzie Delta-Beaufort Sea Basin.

From: Drummond, K.J. 2005, updated to December 31, 2007: Canada's Discovered Oil and Gas Resources North of 60, www.drummondconsulting.com/Canada60North07.pdf

Table 2: Commodity Prices

	December 2006	December 2007	Average 2007
Oil - C$ per m^3 (Average at Edmonton)	431.63	566.23	484.87
Gas - C$ per GJ (Average AECO)	7.55	6.28	6.27

Sources: Natural Resources Canada

OIL AND GAS MANAGEMENT

Rights Issuance

The department provides industry with an annual opportunity to obtain exploration rights in the Northwest Territories, Nunavut and the northern offshore. The exploration rights are issued pursuant to the *Canada Petroleum Resources Act*.

A Call for Nominations precedes each Call for Bids. The Call for Nominations enables industry to specify blocks of land of interest for subsequent inclusion in a Call for Bids. Calls for Bids are in effect for the statutory minimum of 120 days. Crown rights are issued pursuant to an open, competitive bidding process. A single bid evaluation criterion - currently the total expenditure that a bidder would spend on exploration of the land block - is used to determine the successful bidder who is issued an Exploration Licence of up to nine years. The successful bidder is required to spend the dollar value of the proposed work during the first four or five years of the licence and drill one well during this first period.

In accordance with the provisions of comprehensive land claim settlement agreements, the Department seeks the views and support of Aboriginal communities and organizations prior to rights issuance on the terms and conditions of the issuance and related matters. The Department is also working towards establishing measures that would meet the needs and provide economic opportunities for those areas without a land claim settlement, primarily in the southern Northwest Territories.

In November 2006 and January 2007, two Calls for Nominations closed with three parcels nominated in the Beaufort Sea/Mackenzie Delta area and four parcels nominated in the Central Mackenzie Valley. Although a Call for Nominations was issued for the Arctic Islands of Nunavut, no postings were received.

All nominated parcels were included in subsequent Calls for Bids. The Central Mackenzie Valley Call for Bids, which closed on May 8, 2007, resulted in the issuance of four new Exploration Licences (EL442 - 445) covering 310,324 hectares and totaling $15,348,888 of work expenditures. The Beaufort Sea/Mackenzie Delta Call for Bids, which closed on July 17, 2007, resulted in the issuance of three Exploration Licences (EL446 - 448) covering 417,217 hectares and totaling $598,094,231 of work expenditures.

In December 2007, three Calls for Nominations were issued; for the Central Mackenzie Valley and for the Beaufort Sea/Mackenzie Delta both closing January 30, 2008, and Arctic Islands of Nunavut, closing on February 6, 2008. One parcel was nominated in the Central Mackenzie Valley and 5 parcels were nominated in Beaufort Sea/Mackenzie Delta. These were subsequently included in a Call for Bids issued in early February 2008.

Interests Issued in 2007

In 2007, seven new Exploration Licences were issued as a result of the successful Calls for Bids. The four issued in the Central Mackenzie Valley were EL442 to MGM Energy Corp.; EL443 to Husky Oil Operations Limited and International Frontier Resources Corporation; EL444 to BG International Limited and EL445 to BG International Limited and International Frontier Resources Corporation. The remaining three in the Beaufort Sea/Mackenzie Delta were EL446 to Imperial Oil Resources Ventures Limited and ExxonMobil Canada Properties Limited; EL447 to ConocoPhillips Canada Resources Corp., and EL448 to Chevron Canada Limited.

During 2007, six Significant Discovery Licences (SDL) were issued: SDL126 to ConocoPhillips Canada Resources Corp.; SDL127 to Anadarko Canada Corporation, Canadian Forest Oil Ltd. and Paramount Resources; SDL128 and SDL129 to Anadarko Canada Corporation and Paramount Resources Ltd; SDL130 to Devon ARL Corporation; and SDL131 to ConocoPhillips Canada Resources Corp. and MGM Energy Corp. There were no production licences issued in 2007.

During 2007, five Exploration Licences terminated, one by expiry and three by surrender. One licence was partially surrendered.

Significant and Commercial Discovery Declarations and Development Plan Submissions

The National Energy Board issued four significant discovery declarations during 2007: to Chevron Canada Limited in respect of the Chevron et al Olivier H-01 well on the Mackenzie Delta; to EnCana Corporation in respect of the EnCana et al Umiak N-16 well also on the Mackenzie Delta; to Devon Canada Corporation in respect of the Devon Paktoa C-60 well in the Beaufort Sea; and, to Husky Oil Operations Ltd. in respect of the Husky et al Stewart Creek D-57 well in the Central Mackenzie Valley.

The Board also received a significant discovery declaration application from Chevron for the Chevron et al Ellice I-48 well in the Mackenzie Delta during the calendar year 2007 which was declared in early 2008.

No commercial discovery declaration or development plan applications were received or approved during 2007.

Table 3: Exploration Licences Issued as Result of Calls for Bids Since 1996

Region	Number of Licences	Date issued	Licences term in years (periods)
Southern NWT (Fort Liard)	6	April 1996	7 (4+3)
Central Mackenzie Valley	7	May 1997	8 (4+4)
	6	Aug. 2000	8 (4+4)
	5	Sept. 2001	8 (4+4)
	1	May 2003	8 (4+4)
	4	June 2004	8 (4+4)
	6	May 2005	8 (4+4)
	6	May 2006	8 (4+4)
	4	May 2007	8 (4+4)
Beaufort Sea / Mackenzie Delta	2	Jan. 1997	9 (5+4)
	4	Sept. 1999	9 (5+4)
	9	Aug. 2000	9 (5+4)
	2	May 2002	9 (5+4)
	1	June 2004	9 (5+4)
	2	May 2006	9 (5+4)
	1	Sept. 2007	9 (5+4)
	1	Oct. 2007	9 (5+4)
	1	Dec. 2007	9 (5+4)

Table 4: Land Disposition (in hectares) as of December 31, 2007

Region	Exploration Licence	Production Licence	Significant Discovery Licence	Total
Arctic Islands	0	1,224	332,882	334,106
Eastern Arctic Offshore	0	0	11,184	873,684 [1*]
Hudson Bay [4]	0	0	0	126,376 [2*]
Beaufort Sea	1,226,636	0	196,576	1,423,212
Mackenzie Delta	246,015	2,506	109,937	358,458
Mackenzie Valley	1,929,092	32,842	113,915	2,104,641 [3*]

* Former Permits and/or Leases

1 Includes 862,500 hectares in restricted area/under former rights

2 Includes 126,376 hectares in restricted area/under former rights

3 Includes 28,149 hectares under former rights

4 Permits under the administration of the Minister of Indian Affairs and Northern Development

Table 5: Land Disposition by Interest Type as of December 31, 2007

Region	Exploration Licence	Production Licence	Significant Discovery Licence	Former Rights [1]
Arctic Islands	0	1	20	0
Eastern Arctic Offshore	0	0	1	30
Hudson Bay	0	0	0	8 [2]
Beaufort Sea	8	0	34	0
Mackenzie Delta	3	1 [3]	34	0
Mackenzie Valley	24	21	36	17

1 Permits and/or Leases under former legislative regimes
2 Permits under the administration of the Minister of Indian Affairs and Northern Development only
3 On Inuvialuit Lands

Administration of Interests

Exploration Licences

There were 35 Exploration Licences active at the end of 2007. Each Exploration Licence issued as a result of a Call for Bids requires the interest holder to submit 25 percent of the work expenditure bid as a deposit. Both the work deposit required for Period 1 and the rentals in Period 2 are refundable upon completion and approval of the work undertaken on the licence. Should expenditures in Period 1 fail to meet the amount of the work expenditure bid, the residue of the deposit is forfeited. The rentals are required in full at the beginning of each year in Period 2. Any rental balance remaining at the end of Period 2 is forfeit.

Administration of the deposits includes the approval of allowable expenditures submitted as exploratory work is completed. Deposit administration is ongoing throughout the year as new deposits are received for the rentals due in Period 2 and / or amendments are made with respect to those already in the system.

Table 6: Exploration Licences (page 1 of 2)

Licence Number	Area (ha)	Representative [1]	Issue Date (y.m.d)	Well to be Drilled by (y.m.d)		Expiry Date (y.m.d)	Work Bid Amount (in $)
Beaufort Sea/Mackenzie Delta							
EL317 [2]	175,810	Talisman Energy Inc.	1986.10.05	n/a			n/a
EL329 [2]	349,981	BP Canada Energy Resources	1987.09.05	n/a			n/a
EL394	73,155	Chevron Canada Limited	1999.09.18	2004.09.17	✓	2008.09.17	42,375,000.00
EL419[3]	46,507	Petro-Canada	2002.04.18	2004.09.17	✓	2008.09.17	105,293,760.00
EL420[3]	338,469	Devon ARL Corporation	2002.08.15	2005.08.14	✓	2009.08.14	224,069,655.56
EL427-404[3] Area "A"	73,608	Chevron Canada Limited	2004.09.20	2005.08.14	✓	2009.08.14	151,758,288.00
EL427-417[3] Area "B"	18,912	Chevron Canada Limited	2004.09.20	2007.05.13	✓	2011.05.13	
EL427-422[3] Area "C"	56,057	Chevron Canada Limited	2004.09.20	2009.06.07	✓	2013.06.07	
EL434	56,619	MGM Energy Corp.	2006.05.03	2011.05.02		2015.05.02	40,169,000.00
EL435	99,942	Shell Canada Limited	2006.05.03	2011.05.02		2015.05.02	11,552,331.50
EL446	205,321	Imperial Oil Resources Ventures Limited	2007.10.01	2012.09.30		2016.09.30	585,000,000.00
EL447	103,711	ConocoPhillips Canada Resources Corp.	2007.09.01	2012.08.31		2016.08.31	12,084,130.92
EL448	108,185	Chevron Canada Limited	2007.12.31	2012.12.30		2016.12.30	1,010,100.04
Mainland – Central Mackenzie Valley							
EL397	134,964	Husky Oil Operations Limited	2000.08.01	2004.07.31	✓	2008.07.31	16,580,000.00
EL399	120,496	MGM Energy Corp.	2000.08.01	2004.07.31	✓	2008.07.31	8,400,000.00
EL413	80,464	Kodiak Energy Inc.	2001.09.18	2005.09.17	✓	2009.09.17	2,000,000.00
EL414	84,880	Apache Canada Ltd.	2001.09.18	2005.09.17	✓	2009.09.17	10,750,000.00
EL423	90,632	Husky Oil Operations Limited	2004.06.08	2008.06.07		2012.06.07	24,800,000.00

Table 6: Exploration Licences (page 2 of 2)

Licence Number	Area (ha)	Representative [1]	Issue Date (y.m.d)	Well to be Drilled by (y.m.d)		Expiry Date (y.m.d)	Work Bid Amount (in $)
EL424	80,608	MGM Energy Corp.	2004.06.08	2008.06.07		2012.06.07	8,100,000.00
EL425	27,230	Petro-Canada	2004.06.08	2010.06.07		2013.06.07	22,000,000.00
EL426	36,728	MGM Energy Corp.	2004.06.08	2008.06.07		2012.06.07	8,100,000.00
EL428	81,008	Apache Canada Ltd.	2005.05.18	2009.05.17		2013.05.17	3,200,000.00
EL429	82,880	BG International Limited	2005.05.18	2009.05.17		2013.05.17	12,500,000.00
EL430	51,637	MGM Energy Corp.	2005.05.18	2009.05.17		2013.05.17	3,510,000.00
EL431	78,516	Petro-Canada	2005.05.18	2009.05.17		2014.05.17	2,787,792.16
EL432	64,048	BG International Limited	2005.05.18	2009.05.17		2013.05.17	4,000,000.00
EL433	88,004	Petro-Canada	2005.05.18	2009.05.17		2013.05.17	32,128,044.96
EL436	84,353	Talisman Energy Inc.	2006.05.10	2010.05.09		2014.05.09	12,150,000.00
EL437	85,993	Talisman Energy Inc.	2006.05.10	2010.05.09		2014.05.09	32,775,000.00
EL438	87,183	Talisman Energy Inc.	2006.05.10	2010.05.09		2014.05.09	3,850,000.00
EL439	82,820	Talisman Energy Inc.	2006.05.10	2010.05.09		2014.05.09	5,125,000.00
EL440	87,872	MGM Energy Corp.	2006.05.10	2010.05.09		2014.05.09	6,300,000.00
EL441	88,452	Husky Oil Operations Limited	2006.05.10	2010.05.09		2014.05.09	10,500,000.00
EL442	63,312	MGM Energy Corp.	2007.05.10	2011.05.09		2015.05.09	8,260,000.00
EL443	91,116	Husky Oil Operations Limited	2007.05.10	2011.05.09		2015.05.09	4,888,888.00
EL444	74,604	BG International Limited	2007.05.10	2011.05.09		2015.05.09	1,100,000.00
EL445	81,292	BG International Limited	2007.05.10	2011.05.09		2015.05.09	1,100,000.00

[1] These representatives are current to date of draft i.e. December 2007

[2] Under work prohibition orders.

[3] Consolidation per s. 25(3) of the *Canada Petroleum Resources Act*
Note that on consolidated licences, one well may not be sufficient to hold all lands in the licence, depending on the terms and conditions.

√ Well requirement met as of year end. The drilling of one exploratory or delineation well prior to the end of Period 1 of the term is a condition precedent to obtaining tenure to Period 2.

Security Deposits Being Administered as of December 31, 2007

Security deposits for Period 1 and 2 are held on a refundable basis.

Period 1 = $270,850,871 (refunded at $1 for each $4 spent)
Period 2 = $3,398,355 (refunded at $1 for each $1 spent)

Table 7: Revenues ($)

	2002	2003	2004	2005	2006	2007
Rentals	2,621	978	61.111	66,500	62,500	62,749
Issuance and Registration Fees	17,800	5,471	8,600	13,500	19,891	26,998
Forfeitures *	2,392,150	954,812	16,933,374	26,228,000	0	1,290,404
Total	2,412,571	961,261	17,003,085	26,308,000	82,391	1,380,151

* Forfeiture monies are revenues received within the calendar year and may be for Period 1 or 2 of an exploration licence

Benefits

Section 21 of the Canada Petroleum Resources Act (CPRA) requires that a Benefits Plan is submitted to the Minister before any exploration or development activity can take place on frontier lands, i.e., the Northwest Territories, Nunavut and the offshore non-accord areas.

A Benefits Plan is the process by which a company describes the principles, strategies and procedures that it will commit to and implement to ensure that full and fair opportunity is provided to qualified Canadians and Canadian businesses that compete for jobs and business contracts for exploration and development activities. The department requires that a company monitor and submit regular reports on the implementation of the commitments in a Benefits Plan. As a long-standing practice, the department has encouraged companies to favour on a competitive basis local and regional qualified Aboriginal and northern Canadians and businesses.

In terms of exploration and development activities this year on frontier lands, exploration in the Mackenzie Valley provided training, employment and business benefits for local northern communities. In the Southern Mackenzie Valley, ongoing oil and gas production in the Cameron Hills area and gas production in the Fort Liard area supported sustained local and regional economic benefits. In the Mackenzie Delta area and in the northern offshore, renewed activity after a

long hiatus has generated a succession of benefits, and the outlook for continued activity on frontier lands suggests future opportunities. A recent addition to northern exploration activities, gas hydrate research, has also contributed to training, jobs and business opportunities to local northern communities.

The Northern Oil and Gas Branch works closely with the Petroleum Development Division in DIAND's Northwest Territories Regional Office in Yellowknife. This Division administers the Benefits Plans for exploration activities in the region.

Environmental Considerations

As part of the annual process leading to Calls for Nominations, northern aboriginal groups are notified of our intention to open lands, as required under comprehensive land claim agreements, and are provided the opportunity to identify areas of environmental sensitivity, and those of special interest for cultural and spiritual reasons. Other concerns with respect to oil and gas development may also be discussed.

INAC works throughout the year with groups responsible for developing the Protected Areas Strategy, Marine Protected Areas, Migratory Bird Sanctuaries and land use plans, such as the draft Sahtu and Dehcho Land Use Plans, towards maintaining a balanced approach to resource management. INAC also provides territorial governments and other federal departments opportunity for input.

Environmental considerations play an important role in our rights issuance process as well as when issuing land use permits, water licences, and all work authorizations.

The area opened for nominations, the Call for Nominations package, and the terms and conditions associated with both the Calls for Nominations and Bids reflect the results of advice received through this engagement process.

Environmental Studies Research Funds

Under the *Canada Petroleum Resources Act*, the Environmental Studies Research Funds (ESRF) finance environmental and social studies related to the exploration and development of oil and gas resources on frontier lands. Responding to the resurgence of oil and gas activity in the North, the ESRF Management Board funded their northern study program for 2007 through levies agreed to by industry representatives and subsequently approved by the Minister. The budget approved for the North by the ESRF Management Board for 2007 amounted to $487,400.

Two final reports on northern research projects were published: Report #161 "Review of the Ikhil Gas Development and Pipeline Regulatory and Environmental Process: Lessons Learned" prepared by KAVIK-AXYS Inc.; and Report #162 "Assessing the Potential Effects of Nearshore Hydrocarbon Exploration on Ringed Seals in the Beaufort Sea Region 2003-2006" by Lois Harwood, Thomas G. Smith and Humfrey Melling.

Work was completed on the project to compile an inventory of well sumps in the Inuvialuit Settlement Region and to establish a sumps

database which will be publically accessible through Indian and Northern Affairs Canada. Other 2007 projects included: a workshop to provide feedback on the traditional knowledge guidance document for environmental assessment, an initial draft of the biophysical research requirements (data gaps) for Beaufort Sea hydrocarbon development, and a northern cumulative effects study.

EXPLORATION ACTIVITY IN THE NORTH

Northern Operations

Only three new exploratory wells were commenced in 2007 - all in the Mackenzie Delta. Although no drilling occurred in the Central Mackenzie Valley, exploration companies were active with seismic programs. Drilling is expected to resume next winter season.

In the southern Northwest Territories, development drilling continued at Cameron Hills to sustain oil and gas production. Six new wells were drilled between January 15 and March 4. In addition to new wells, seven existing wells were re-entered in the southern Northwest Territories for various well operations.

Two new wells were drilled on the Mackenzie Delta at Kugpik I-25 and Unipkat M-45. Both were on EL394, acquired by MGM Energy from Chevron. Late in the year the company spudded a new well at Atik P-19 on EL419. This is the first of a three well program planned for winter 2007-2008.

Also on the Mackenzie Delta two test wells were re-entered at Mallik as part of the continuation of the scientific and engineering research program on gas hydrates.

The total metreage drilled in the Northwest Territories (including both exploratory and development wells) was 13,616 m, only slightly less than in 2007. There were no oil and gas drilling/ operations in Nunavut or the eastern Arctic. New well costs amounted to $46 million and re-entries of existing wells to $22 million.

Fourteen industry geophysical and geological programs were conducted in 2007. This total comprised five field seismic acquisition programs totaling an estimated 6027 km of 2-dimensional (2D). The most extensive of these was conducted in the Beaufort Sea where GXT returned to extend its seismic coverage acquired the previous year. The area of interest extended to deeper water areas and to waters offshore Banks Island. Kodiak, Talisman and BG Canada each shot separate 2D seismic programs in the Central Mackenzie Valley on their respective Exploration Licences.

In addition, one aeromagnetic program, one geological field party, four gravity surveys and two geochemical surveys were undertaken – all in the Northwest Territories. One program entailed reprocessing of existing seismic data only, with no field acquisition.

Table 8: Drilling Statistics – 2007

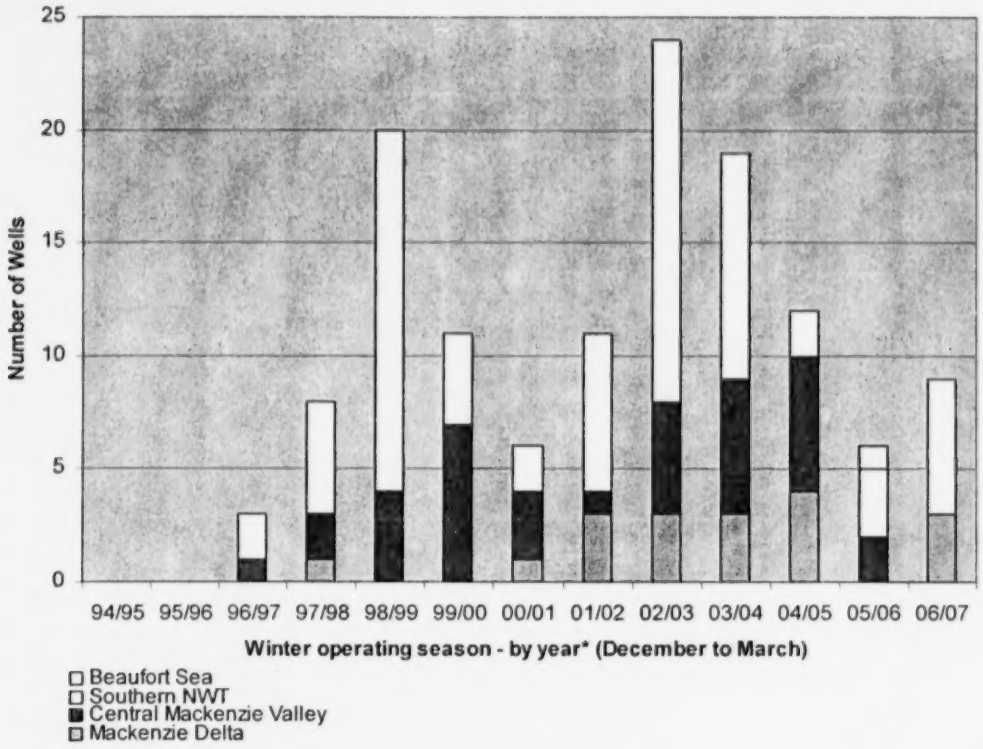
WELL NAME	LAT	LONG	CLASS[1]	Total Depth (m)	Meters Drilled in 2007	Begun	Rig Released	STATUS[2]	LICENCE[3]
Southern Territories									
PARA ET AL CAMERON L-40	60.1599	-117.6211	Dev	1453	1453	15-Jan-07	26-Jan-07	P&S	PL15
PARA ET AL CAMERON J-04	60.0587	-117.5133	Dev	1448.7	1448.7	26-Jan-07	16-Feb-07	P&S	PL13
PARA ET AL CAMERON L-29	60.1448	-117.5929	D	1515	1515	28-Jan-07	7-Feb-07	P&S	PL18
PARA ET AL CAMERON L-73	60.0440	-117.4984	Dev	1450	1450	10-Feb-07	1-Mar-07	P&S	PL04
PARA ET AL CAMERON A-03	60.0368	-117.5003	Dev	1589	1589	10-Feb-07	21-Feb-07	P&S	PL17
PARA ET AL CAMERON E-72	60.0237	-117.4975	Dev	1450	1450	24-Feb-07	4-Mar-07	P&S	PL20
Mackenzie Delta									
Chevron et al Kumak I-25	69.2451	-135.0846	E	2100	2100	7-Feb-07	7-Mar-07	P&S	EL394
Chevron et al Unipkat M-45	69.2488	-135.4558	E	1397	1397	14-Mar-07	22-Mar-07	P&A	EL394
MGM et al Atik P-19	69.9682	-135.5345	E	1803	589	23-Dec-07	26-Jan-07	P&S	EL419
Well Re-Entries									
PARA ET AL SOUTHEAST FORT LIARD N-01	60.01453	-123.2663	E	1940	1940	23-Jan-07	5-Feb-07	P&S	PL12
PARA ET AL CAMERON E-07	60.10553	-117.5271	Dev	1457	1457	24-Jan-07	5-Feb-07	P&S	PL14
PARA ET AL CAMERON 2F-73	60.0401	-117.4914	D	1562	1562	5-Feb-07	8-Feb-07	Pr	PL04
AURORA/JOGMEC/NRCAN MALLIK 2L-38	69.46131	-134.6584	Dev	1320	1320	15-Feb-07	10-Apr-07	P&S	SDL060
AURORA/JOGMEC/NRCAN MALLIK 3L-38	69.46064	-134.6616	O	1188	1188	15-Feb-07	17-Mar-07	P&S	SDL060
PARAMOUNT ET AL CAMERON A-05	60.06728	-117.5076	E	1514.6	1514.6	19-Feb-07	27-Feb-07	Pr	PL13
PARA ET AL CAMERON H-03	60.0399	-117.5021	Dev	1662	1662	24-Feb-07	26-Feb-07	P&S	PL17
PARA ET AL CAMERON C-74	60.05369	-117.4909	Dev	1626	1626	26-Feb-07	27-Feb-07	Pr	PL13
PARAMOUNT ET AL BOVIE C-76A	60.25411	-122.9895	E	3464	3464	1-Mar-07	31-Mar-07	P&S	SDL122

[1] Class E=exploratory, D=delineation, P=production, Dev=development
[2] Status P&S=plugged and suspended, P&A=plugged and abandoned , PR=production
[3] Licence EL=Exploration Licence, SDL=Significant Discovery Licence, PL=Production Licence, SA=Sahtu Lands

Table 9: Seismic Acquisition

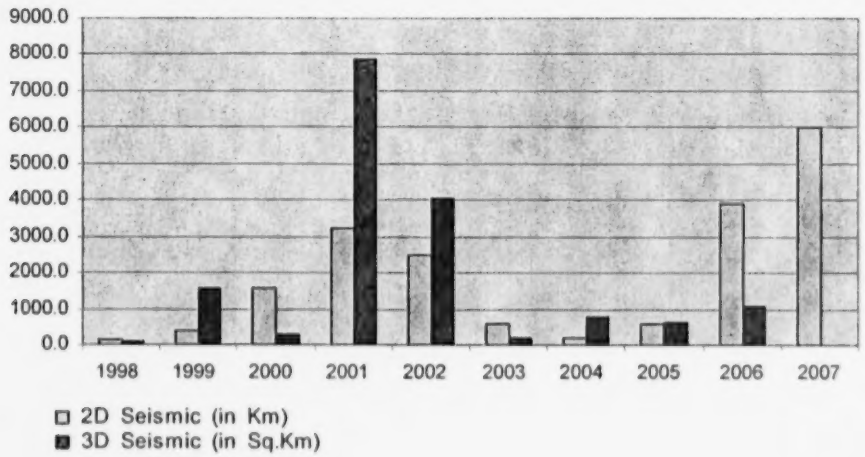
	2000	2001	2002	2003	2004	2005	2006	2007
2D Seismic (in Km)	1554.0	3251.0	2506.0	586.0	189.0	564.0	5483	6027.95
3D Seismic (in Sq.Km)	307.0	7893.0	4060.0	194.0	804.0	635.0	1100	0

Figure 1: Wells Drilled



*Excludes Norman Wells development drilling

Figure 2: Seismic Acquisition



DEVELOPMENT AND PRODUCTION

During the course of 2007, Paramount Resources Ltd. announced that it would be suspending operations in the Liard Basin. Production from two fields (Liard and South-east Liard) was suspended by year-end. The company cited low natural gas prices, few new gas finds and lack of new lands opening for exploration as the main reasons for this action. The West Liard field feeding the Liard pipeline has been in sharp decline for several years but was still producing from one well at year end. Apart from this, the only field producing from the southern Northwest Territories by year-end was Cameron Hills, also operated by Paramount.

Only two other fields were on production in the Northwest Territories: the large Norman Wells oil field in the Central Mackenzie Valley and the Ikhil gas field on the Mackenzie Delta. The former is the northern anchor for the Enbridge Norman Wells oil pipeline which terminates in Zama, Alberta, while Ikhil gas is produced through a 50 kilometre pipeline to Inuvik where it is used for power generation and heating. No fields were producing from Nunavut or offshore Arctic waters.

Total natural gas production in the Northwest Territories in 2006 was 322.3 x 10^6 m^3 (11.4 billion cubic feet), about one third of this represents associated gas at Norman Wells which is used for field operations.

Total aggregate oil production was 1017.6 x 10^3 m^3 (6.41 million barrels), reflecting the steady 5% decline in production from Norman Wells and lower production from Cameron Hills.

Table 10: Oil and Gas Production

	2002	2003	2004	2005	2006	2007
Oil Production (thousands of m3)						
Norman Wells (G001 - Imperial Oil)	1375.4	1254.6	1186.7	1042.6	1012.4	964.3
Cameron Hills (G010 - Paramount)	1.1	28.5	48.6	47.2	70.3	53.3
Total	**1376.5**	**1283.1**	**1235.3**	**1089.8**	**1082.7**	**1017.6**
Gas Production (millions of m3)						
Norman Wells (G001 - Imperial Oil)	123.3	108.6	103.7	102.4	109.3	103.7
Ikhil (G005 - AltaGas)	14.8	15.2	16.1	15.7	16.2*	17.9
Fort Liard (G-006 -"F-36" - Paramount)	38.8	16.5	11.2	50.7	29.9	52.6[1]
Fort Liard (G007 - "K-29" - Paramount)	834.1	680.3	465.4	203.3	59.1	49.1
Fort Liard (G008 - "P-66A" - CNRL)	Shut-in	9.8	Shut-in	Shut-in	Shut-in	Shut-in[2]
Southeast Fort Liard (G009 - "N-01" - Paramount)	61.9	51.1	48.1	38.8	11.9	0[1]
Cameron Hills (G010 - Paramount)	124.1	104.1	92.8	91.3	93.5	99.0
Total	**1197**	**985.6**	**737.3**	**502.2**	**318.9**	**322.3**

*Previously reported amounts have been restated to reflect amendments and corrections.

[1] Production suspended at year-end.

[2] Abandoned

Figure 3: Oil Production

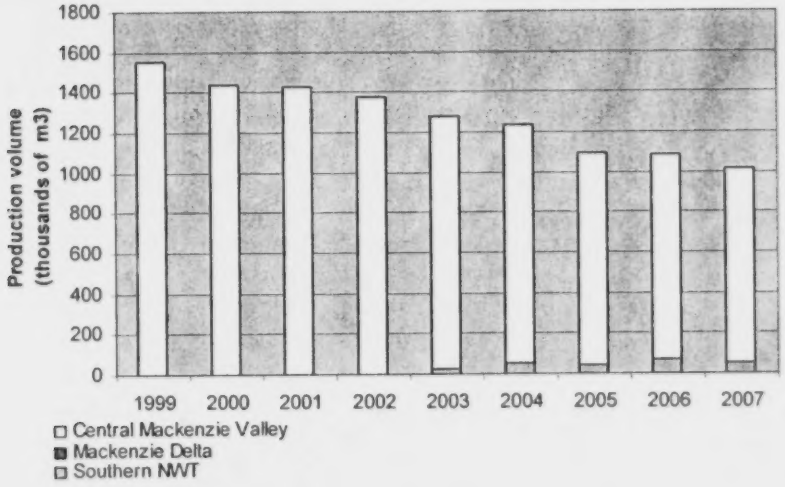


Figure 4: Gas Production

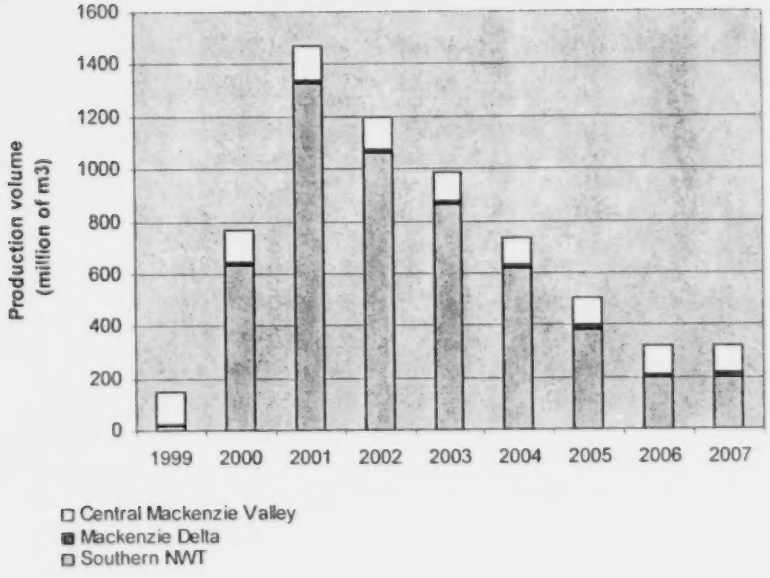
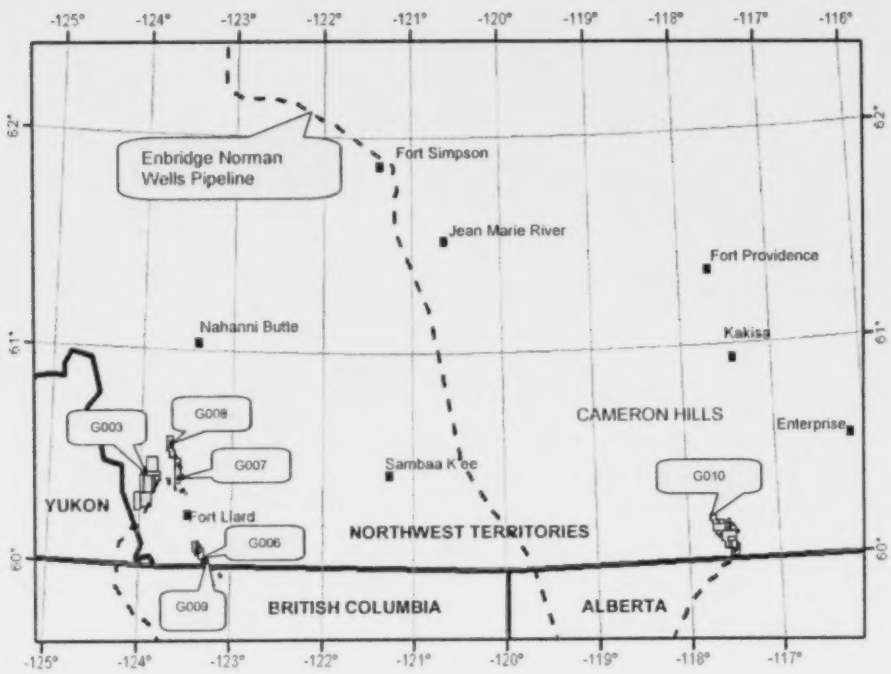


Figure 5: Oil and Gas Fields – Southern Northwest Territories



Field Code (New Code)	Field Name (Discovery Well)	Licences
G003	Pointed Mountain *	PPL 01- 09
G006 (6675)	Fort Liard ("F-36")	PL 07, PL08
G007 (6674)	Liard ("K-29")	PL09, PL11
G008	Liard ("P-66A")*	PL10
G009 (6678)	Southeast Fort Liard ("N-01")	PL12
G010 (3200)	Cameron Hills	PL03-05, PL13-18

*Abandoned

ROYALTIES

Royalties paid from northern oil and gas production in the calendar year 2007 were $25,078,071.

The 18 percent decrease from 2006 is because the 2006 total included amounts from adjustments to the 2004 and 2005 years.

Table 11: Royalty Revenues ($)

	2002	2003	2004	2005	2006	2007
Royalty *	21,754,854	24,509,774	20,560,265	16,051,861	30,477,442	25,078,071

* Previously reported amounts have been restated to reflect amendments and corrections

Audits and Assessments

Two audits were underway during 2007. One audit was completed and the second audit is scheduled to be completed in 2008.

Royalty Administration

The development of a new web-based royalty management system (RMS) continued. During 2007 significant progress was made on the development of the system. At year end, it was undergoing user acceptance testing. It is scheduled to be rolled out in 2008.

Regulatory Review

A project is underway to modernize the *Frontier Lands Petroleum Royalty Regulations* (FLPRR). The project's objectives are to identify areas where the regulations could be amended to better meet today's operating environment, to strengthen royalty accountability and assurance, to improve fairness, and to improve the administrative efficiency of the royalty regime.

On December 15, 2007, the regulatory amendments were published in the Canada Gazette Part I for a 30 day comment period. Comments were received from one stakeholder group, who expressed their support for the amendments.

FURTHER INFORMATION

Northern Oil and Gas Branch

Please check our website first at www.ainc-inac.gc.ca/oil

Many sources of information on oil and gas, environmental, and land use matters originate with the Department of Indian Affairs and Northern Development. To obtain specific information, please contact appropriate individuals below by phone or in writing through the general mailing address for the Department.

Mailing address:
Northern Oil and Gas Branch
Oil and Gas Management Directorate
Department of Indian and Northern Affairs
OTTAWA ON K1A 0H4

Courier only:
Northern Oil and Gas Branch
Oil and Gas Management Directorate
10th Floor, 15/25 Eddy Street
GATINEAU QC K1A 0H4
Telephone: (819) 997-0877
Fax: (819) 953-5828

Information on the resource management regime, calls for nominations and bids, and other related information: Manager, Land Tenure – Telephone: (819) 934-9392

Information on registration procedures and regulations, exploration, significant discovery and production licences, transfers, and notices: Registrar – Telephone: (819) 953-8529

Information on Northern Oil and Gas Maps, and Geographic Information System (GIS) Data: Geomatic Officer – Telephone: (819) 953-8988.

Information on northern exploration history and geological / geophysical activities: Senior Petroleum Geologist – Telephone: (819) 953-8722

Information on royalty policy and royalty submissions: Manager, Fiscal Policy and Royalty Administration – Telephone: (819) 953-8790

Information on Benefits Plan requirements for Nunavut and northern offshore is available from the Northern Oil and Gas Branch – Telephone (819) 953-2087.

Information on Benefits Plan requirements associated with new exploration programs on land in the Northwest Territories is available from the department's Northwest Territories Regional Office at:

Petroleum Development and Benefits Division
Northwest Territories Regional Office
Department of Indian and Northern Affairs
4914-50th Street, P.O. Box 1500
YELLOWKNIFE NT X1A 2R3

Telephone: (867) 669-2618 / Fax: (867) 669-2409

Other Sources of Information

Through the offices of the National Energy Board at the address below, information on the following is available

- The Regulatory Support Office has information on exploration, development, production, pipeline transportation, and export.
- The Frontier Information Office provides access to maps, technical information, geological and geophysical reports, well history reports and records.
- The Environmental Directorate provides the Secretariat for the Environmental Studies Research Funds Management Board.

National Energy Board (NEB)
444 Seventh Avenue SW
CALGARY AB T2P 0X8
Telephone: (403) 292-4800
Fax: (403) 292-5503

Geological Survey of Canada Calgary provides public viewing and sampling facilities for cores and samples, and information on wells drilled north of 60°N at its offices at:

Geological Survey of Canada Calgary
3303-33rd Street NW
CALGARY AB T2L 2A7
Telephone: (403) 292-7000
Fax: (403) 292-5377

Information on wells drilled in the Baffin Bay – Davis Strait region is available from:

Iris A. Hardy, Curator National Marine Geosciences Collection
Geological Survey of Canada Atlantic
Core Storage and Laboratory
Bedford Institute of Oceanography
P.O. Box 1006
DARTMOUTH NS B2Y 4A2
Telephone: (902) 426-6127
Fax: (902) 426-4465
Email: ihardy@nrcan-rncan.gc.ca